CI/SfB
(32.5) Ro8 (K2)

LORIENT
ASSA ABLOY

TALKBACK DAMPER CONTROL SYSTEM SPECIFICATION OVERVIEW

TALKBACK DAMPER CONTROL SYSTEM

All ducts and airways in doors and walls can be protected against fire and hot smoke using Lorient intumescent air transfer grilles. However, these grilles will not prevent the passage of cold smoke which can be equally dangerous.

Damper / Shutter Assembly

To address this problem Lorient has developed a smoke damper assembly for use in conjunction with Lorient intumescent air transfer grilles.* The assembly comprises three slotted plates - two fixed plates sandwiching a central moving plate. The central plate is operated by a fail-safe motorised actuator. A movement of just 10mm changes the relative positions of the slots from "through flow" to "fully closed".

Talkback Damper Control System

Most large buildings require a significant number of FD30S and FD60S fire doors (30 or 60 minute fire doors which also provide protection against cold smoke) within any one fire zone. These doors may be a considerable distance apart, or even on different floors.

The Talkback system has been designed to control up to sixteen air transfer grille assemblies from one centralised status monitoring unit. A unique 2-way communication system operates between the Damper Control and Monitor Unit (DCM) and the air transfer grille actuators. This facilitates a rapid assessment of the status of the installation and immediately identifies and locates any defective air transfer grilles.

Talkback is designed to give peace of mind to a building's occupants in that it:

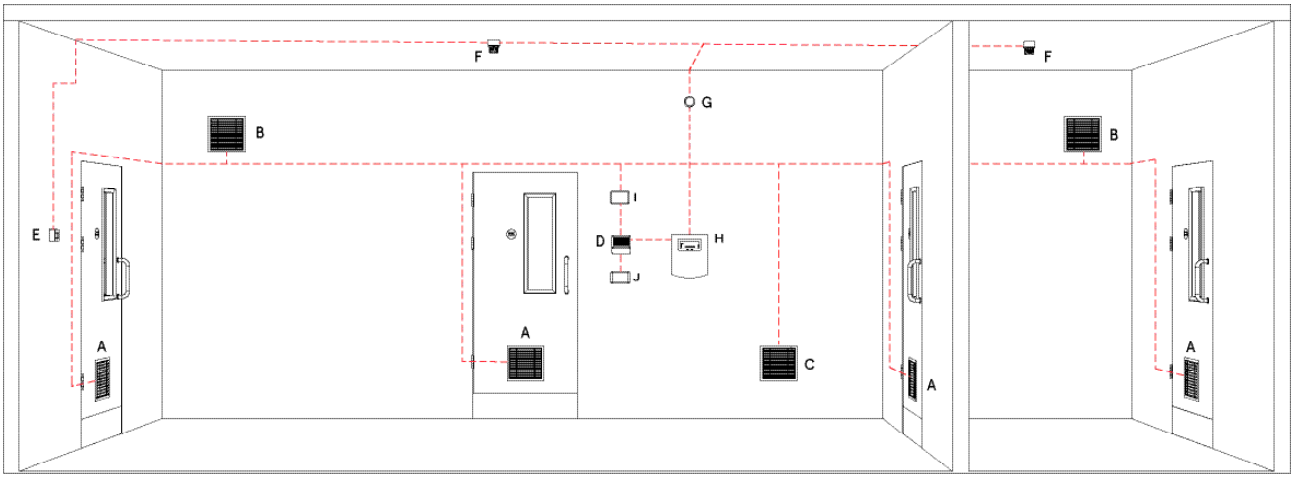
- is fail-safe – the smoke shutters will automatically close in the event of an alarm, power failure or damage to the wiring;
- resets automatically – when the alarm is cancelled or power restored;
- is self-testing – every 24 hours the dampers are automatically closed and opened to check they are working and to dislodge any dust and debris between the moving parts;
- continuously monitors the status of each damper and displays this on the DCM;
- is easy and quick to install – simple loop wiring is used and the damper units are supplied ready assembled and tested;
- uses a safe 12V DC supply to open and close the dampers;
- has been successfully tested in accordance with the requirements of the Electro Magnetic Compatibility and Low Voltage Directive and therefore bears the CE mark (copies of the relevant test reports are available on request).



Damper& actuator

***Note:** 'S' suffix added to product code. Shutter assembly cannot be added to standard air transfer grilles retrospectively.*

TYPICAL INSTALLATION OF THE LORIENT TALKBACK SYSTEM



A: Door mounted fire + smoke air transfer grilles
B: End of duct fire + smoke air transfer grilles
C: Wall mounted fire + smoke air transfer grilles
D: Power + monitor unit
E: Fire point
F: Smoke sensors
G: Fire alarm
H: Fire alarm panel
I: Audio / Visual alarm
J: Battery back-up

LORIENT
ASSA ABLOY

TALKBACK DAMPER CONTROL SYSTEM

The talkback damper control system offers a number of operating features as standard, including:

FEATURE	DETAIL
FAIL SAFE	Designed to close automatically in the event of a fire alarm being activated, a power failure or wiring damage.
AUTO RESET	Will reset automatically to the open position when the fire alarm is cancelled or power restored.
AUTO CYCLING	Once in every twenty-four hours each air transfer grille/shutter is closed and re-opened to prevent a build up of dust or debris between moving parts.
RADIAL RING WIRING	Up to 16 air transfer grilles/shutters can be connected via a 3-core cable that can be arranged in a ring. The Damper Control Monitor (DCM) powers the dampers/shutters using only safe low DC voltages.
CONTINUOUS MONITORING	"Talkback" air transfer grilles are monitored continuously by the Lorient DCM which identifies the status of each individual air transfer grille/shutter through its unique address.
POSITIVE CLOSING	Energy stored within a capacitor on each air transfer grille/shutter actuator is used to power the electric motor to the closed position in the event of a fire alarm being activated.
SOLID STATE	Solid state microchip technology is employed to provide versatility and reliability.
ASSEMBLED / TESTED	Each air transfer grille/shutter is assembled and fully tested at Lorient, therefore requiring no adjustment to the mechanism on site, facilitating simple installation. It is only necessary to confirm that each damper has been allotted its own address and resetting if required.
COMPATIBILITY	The "Talkback" system is designed to interface with any fire alarm panel and subsequent to the initial installation, additional air transfer grilles/shutters can be incorporated up to a maximum of 16 per DCM.
C E MARKING	Successfully tested in accordance with the requirements of Electro Magnetic Compatibility and Low Voltage Directive, and therefore bears the CE mark. (Conformité Européen).
ADDRESSABLE ACTUATORS	Each actuator address number can be set on site but air transfer grilles must not be allotted a shared number on the same DCM.

OPTIONAL FEATURES:

AUDIO/VISUAL WARNING	An extra optional Audio Monitoring System (AMS) can be connected to the DCM wiring circuit. This device would be incorporated to draw attention to the DCM status display in the event of a fault occurring.
B.M.S MONITORING	The Audio Monitor can be used to communicate with a BMS or fire panel. A no volt contact (normally open) is provided for within the AMS in order to provide a fault indicator to the BMS.
BATTERY BACK UP	The DCM incorporates a connection for a battery back up option. An appropriate re-chargeable battery and enclosure is available from Lorient if required.

TALKBACK SPECIFICATION

ATG MODELS: LVN20S, LVH44S, LVV40S, LVHCTD, TALKBACK

TEST STANDARDS	BS 476-31/31.1 BS 476-20/22 BS EN 1364-5 (LVV40S + LVH44S) AS 1530-4 (LVH20S) EN 58001-1:1992 EN 58002-1:1992 IEC 1010-1:1990, Amendment 1:1992 and Amendment 2:1995
DESIGNATION	Smoke control shutter system. Provides fire + smoke resistance in conjunction with intumescent air transfer grille.
APPLICATION	Door, wall + duct: Effective for cold smoke.
SUPPLY VOLTAGE	230 VAC 50/60 Hz (use 1A fuse protection)
OUTPUT VOLTAGE	12.8 VDC
INPUT TRIGGER FIRE PANEL	24 VDC or No Volt Contact
B.M.S TRIGGER	No Volt Contact
SHUTTER ACTUATOR CURRENT DRAW	5mA per actuator in open position / 200mA on opening
BATTERY BACKUP (OPTIONAL)	Capacity 12 VDC 1.2 Ah
CABLE RUNS	Ring Circuit (Max 1 Circuit): 1.5mm2 3 core cable max 150m 2.5mm2 3 core cable max 250m Radial Circuit (Max 2 Circuits): 1.5mm2 3 core cable max 75m 2.5mm2 3 core cable max 125m
DCM DIMENSIONS	165 w x 155 h x 125 d mm
BATTERY BACKUP DIMENSIONS	162 w x 120 h x 75 d mm
AMS DIMENSIONS	115 w x 115 h x 60 d mm
SMOKE SHUTTER DIMENSIONS	Max size determined by air transfer grille choice and application. Various options covered under third party certification : Certifire CF564
DCM CONNECTIONS	Mains Supply: (+ve / -ve) **Option 1.** Alarm Interface 2: 0 Volt Normally Closed (+ve / -ve) **Option 2.** Alarm Interface 1: 24V Normally On (+ve / -ve) Supply/Signal 1: 12.8 VDC (+ve / -ve / Sig) Supply/Signal 2: 12.8 VDC (+ve / -ve / Sig) Battery Backup: (+ve / -ve)
SYSTEM MONITORING	Auto cycles each damper every 24hrs DCM displays damper status (Open/Closed/Fault or Not Connected) Communication between DCM & damper every 10s Fail Safe within 10s of signal loss Manual Test override for alarm simulation

WIRING LAYOUT

SCHEMATIC WIRING INSTALLATIONS

DIAGRAM A:
Ringed wiring installation

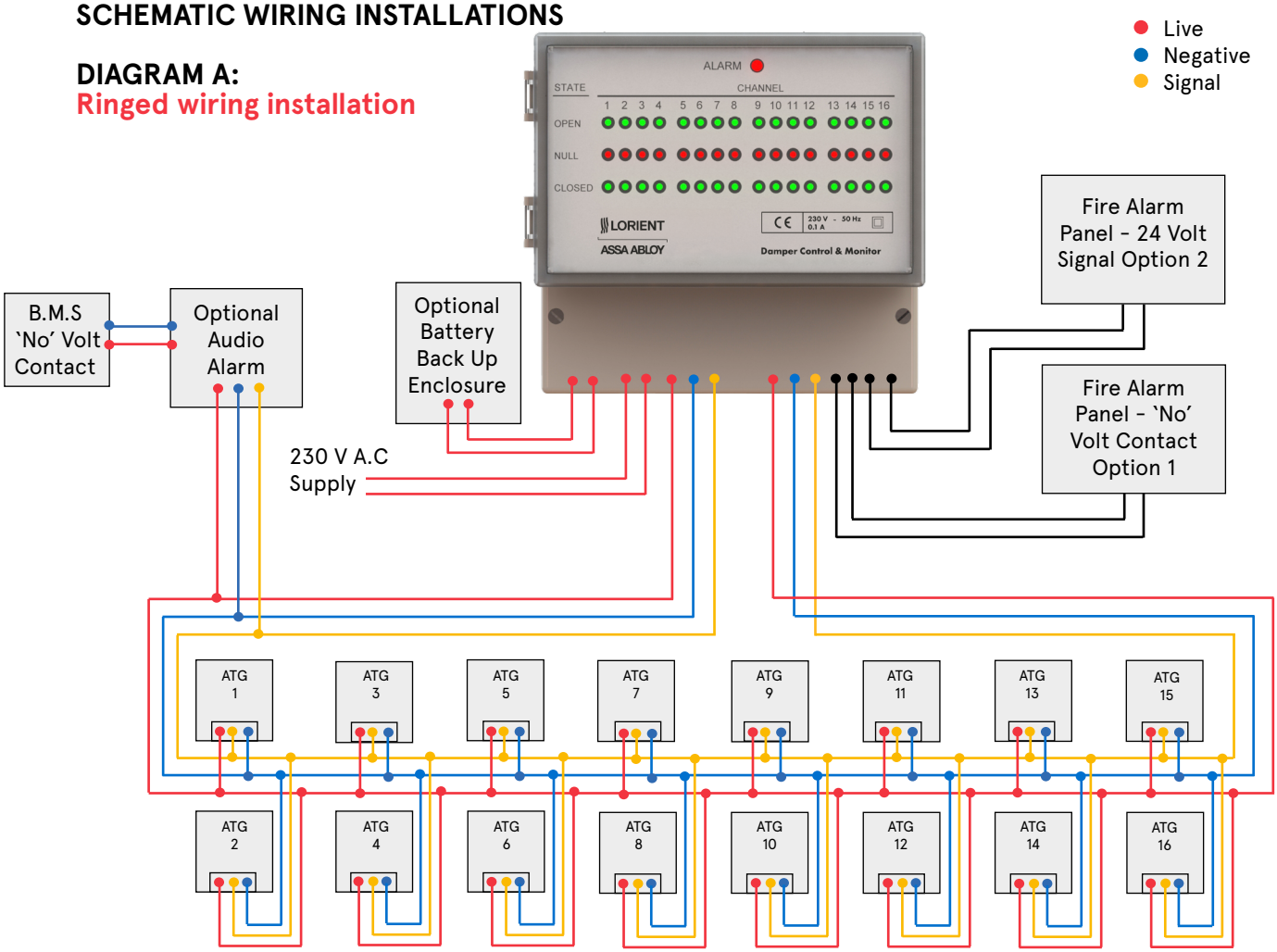
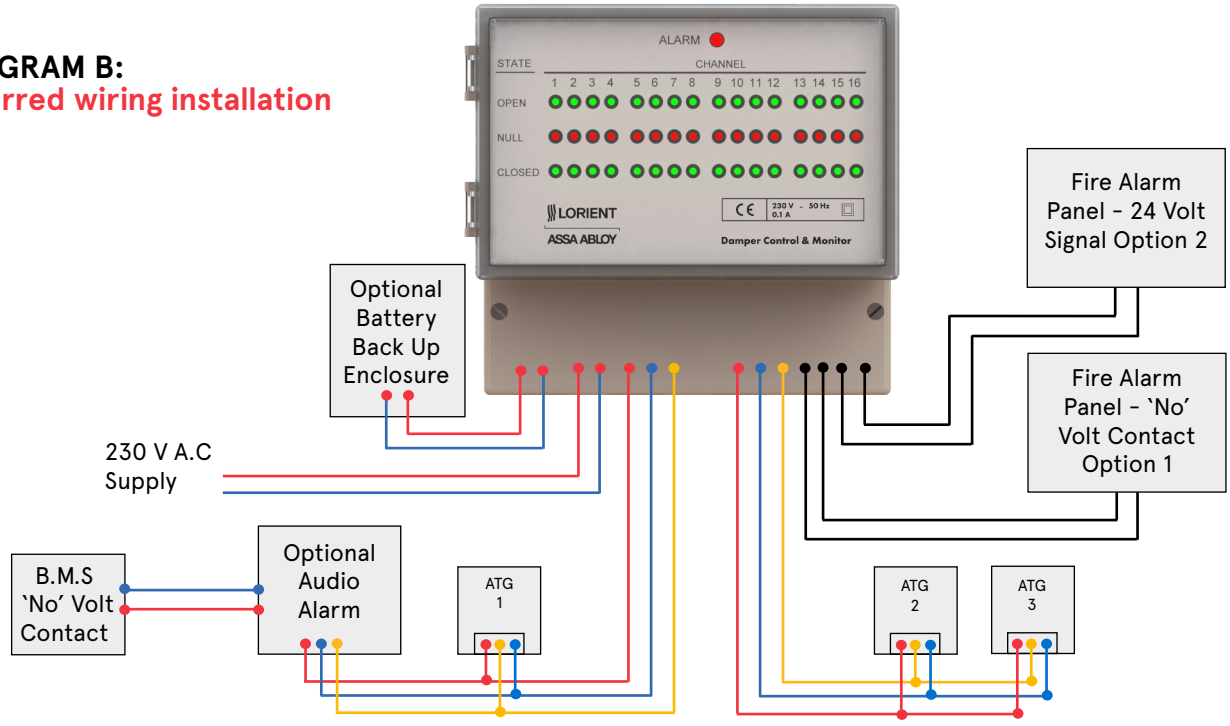


DIAGRAM B:
Spurred wiring installation



FAQS

How does a fire & smoke resistant air transfer grile work?

Our fire and smoke resistant air transfer grilles (ATGs) work in the same way as a fire resistant ATG, but they also incorporate an electro mechanically operated smoke shutter mechanism. In the event of an alarm condition, or power failure, the shutters close, preventing the passage of cold smoke.

How many air transfer grilles can be connected to the Talkback Damper System?

Up to 16 fire & smoke resistant air transfer grilles can be connected to each Talkback Damper Control Monitor (DCM) using a 3-core cable arranged in a ring. With 1mm² wire, the ring system can have a maximum length of 100 meters, including the longest spur to the fire & smoke resistant air transfer grilles. For a radial or spurred system, each leg can have a maximum length of 50 meters. These lengths can be increased proportionally by increments of wire cross-sectional area. Note that using a spurred system may limit the number of dampers that can be connected to a DCM.

How should the Talkback DCM be positioned within a building?

Damper Control Monitors should always be located where they can be routinely viewed. If adding an Audio Monitoring System (AMS), it should be positioned where the audio warning can be heard by a responsible member of staff. The AMS does not need to be situated next to the Talkback DCM.

What type of cable should be used for the Talkback Damper System?

A three-core cable with 1mm² wire is recommended. For specific cable requirements and configurations, please consult the wiring instructions document.

Can I use fire-resistant cable for the Talkback Damper System?

Yes, fire-resistant cable may be used if it meets the required capacity. Detailed specifications can be found in the wiring instructions document.

What should I do if there is a fault indicated by the DCM?

If a fault is indicated, follow the troubleshooting steps outlined in the fault finding document on the Lorient website.

Call our Technical Services team

+44 (0) 1626 834252

www.lorientuk.com



LVH44S fire + smoke resistant air transfer grille

Commissioning and maintenance

We offer a professional and expert commissioning service for fire and smoke air transfer grilles.

We check and test the installation and components of Lorient fire and smoke air transfer grilles; and issue a fully detailed service report, highlighting status and compliance.

Our comprehensive service covers a number of factors, including:

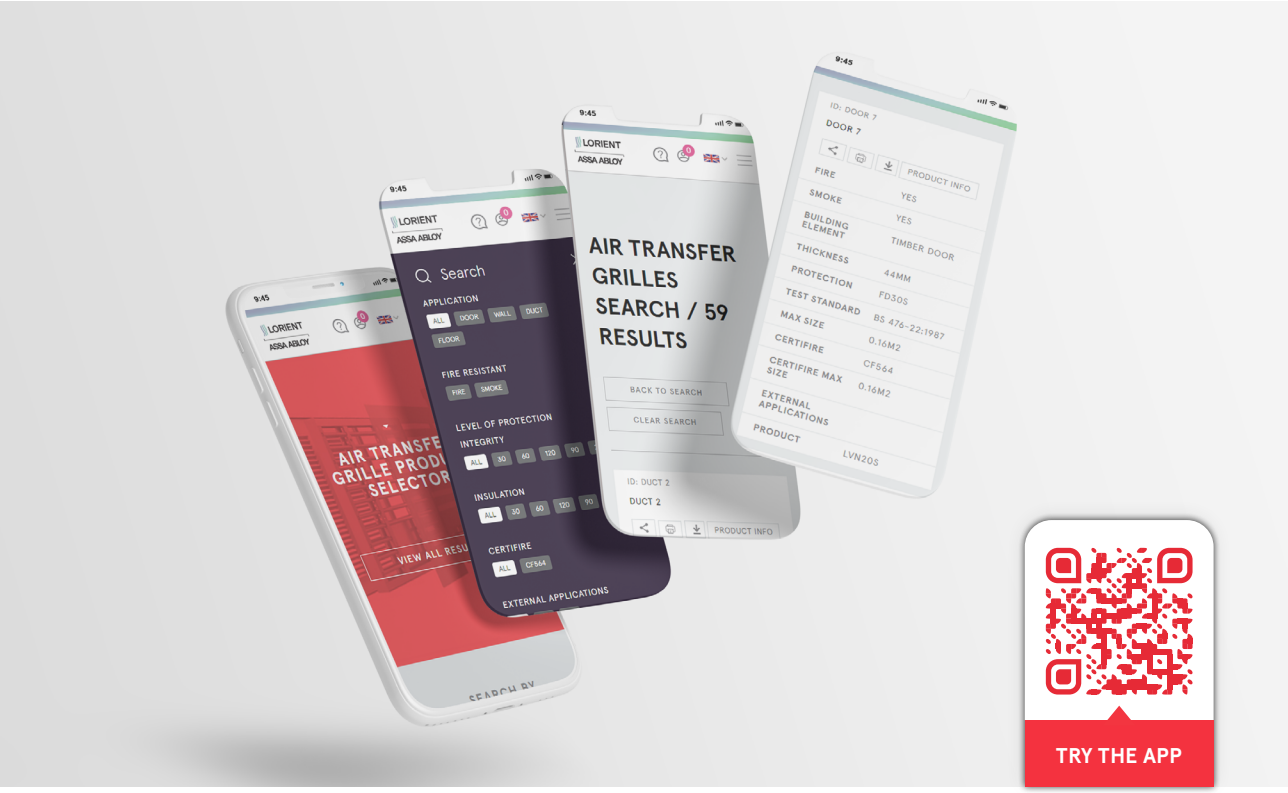
- Checking the system is installed as per Lorient recommendations and is compliant with test evidence.
- Providing documented evidence that the system is functioning as per requirements.
- Checking the full functionality of the system, which can be coupled with witness testing to demonstrate functionality and compliance if required.
- Providing documented installation detail, which can be used in off-site support and/or included in site handover.
- Reducing delays caused by improper installation which require technical support.

Please contact our Testing + Technical Services team for pricing and further information on **+44 (0)1626 834252** or email **technical@lorientuk.com**

LORIENT
ASSA ABLOY

ATG PRODUCT SELECTOR

The ATG Product Selector tool on our website gives quick and easy access to a wide range of tested air transfer grille applications.



The correct specification of intumescent air transfer grilles is critical, that's why Lorient designed an ATG product selector tool to help select suitable products for various applications.

The tool allows users to select an air transfer grille based on a number of factors, including; application, fire resistance, and level and mode of protection.

With multiple ways to search, the web app enables the quick and easy specification of air transfer grilles.

- Intuitive Search
- Precise Specifications
- Free area characteristics
- Reliable Performance
- Trusted by Professionals.

Visit our website and use the ATG Product Selector tool today to find the ideal air transfer grille for your needs.

LORIENT

ASSA ABLOY

ACK

ER

ROL

M

UK / EUROPE
T: +44 (0) 1626 834252
E: sales@lorientuk.com

AUSTRALIA
T: +61 (0) 3 8574 3888
E: customerservice.au@assaabloy.com

SINGAPORE
T: +65 6880 0000
E: sales.lorient@assaabloy.com

HONG KONG
T: +852 2260 0888
E: sales@lorienthk.com

UAE
T: +971 4 8804888
E: mktg@lorientuk.com

USA
T: +1 859 252 7441
E: info@lorientna.com

For further information about Lorient products please visit:
www.lorientgroup.com

@lorientuk
/company/lorient
@lorientuk
@lorientuk
@lorientuk
@lorientuk

REVISION 2.3